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10/565,067

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EXAMINER

VO, TUYET THI

ART UNIT

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2821

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/565,067 | Applicant(s) OGURA ET AL. | |
| | Examiner TUYET VO | Art Unit 2821 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after the Final Office Action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on September 15, 2009 has been entered.

Accordingly, claims 8-14 are currently presented in the application.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **a secondary side isolated from a primary side for generating a direct current or for generating a power supply voltage and a feedback section isolates the rectified voltage** must be shown or the features canceled from the claims 8 and 14. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Claim 14, line 5, recitation of “**feedback section isolates the rectified voltage**” is not found clearly supported in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 8, lines 8 and 14, a recitation of “**a secondary side isolated from a primary side**” causes a confusion because secondary side of what thing/circuit being isolated from its primary side and this isolation being arranged in term of physical or electrical isolated manner.

8. Claims 9-14 are rejected due to their virtual dependency on the defective claim 8.

Correction made to claim 8 would also alleviate unclarity toward claims 9-14 as well.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. For best understood, claims 8, 10 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US Pub. 2004/0145584).

Regarding claims 8 and 10, Lee discloses a display apparatus (Figs. 3, 4, 6 and 7) having a backlight section (510, Fig. 6) and a load panel display (800, Fig. 6), other than said backlight section including a fluorescent lamp, said display apparatus comprising:

an input-voltage generation section (210 and 242-a, Fig. 3) for generating a direct current input voltage from an alternating current (100);

a first power conversion section (242-b, Fig. 3) including a primary side (from transformer T2) for receiving said direct current input voltage (210 and 242-a) and a secondary side isolated physically from said primary side for generating a direct current power-supply voltage to be supplied to said load (800) as a result of a DC-DC power conversion process carried out on said direct current input voltage;

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a second power conversion section (T3, D6, Q7; 400, Fig. 7) including a primary side of a transformer T3 for receiving said direct current input voltage, a secondary side of a transformer T4 isolated physically from said primary side of the transformer T3 for generating a power-supply voltage to be supplied to said backlight section (510, Fig. 7) a detection circuit (R3, Fig. 7) for detecting a voltage supplied to said backlight section (510) through a voltage across a resistor (R3), a feedback section (D7, D8) for receiving the detected voltage from said detection section (R3), for rectifying the detected voltage via a feedback circuit (D8), and for supplying the rectified voltage to said primary side of the transformer T3 arranged in a primary side of said second power conversion section, wherein said second power conversion section carries out power conversion process by performing a DC-AC power conversion process to generate an alternating current as said power-supply voltage to be supplied to said fluorescent tube; and

a display section (850) for displaying a picture using said backlight section (510).

Regarding claims 12-14, Lee further discloses:

said input-voltage generation section includes a rectification/smoothing circuit (D1-D4; Fig. 7) having a plurality of diodes for rectifying the alternating current, and a capacitor (C1) for smoothing a rectified output of said plurality of diodes, and said input-voltage generation section generates said direct current input voltage as a voltage appearing between terminals of said capacitor.

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said input-voltage generation section includes a power- factor improvement converter (Q1, L, D5, Fig. 7) for generating a stabilized direct current output voltage as the direct current input voltage, and

said second power conversion section includes a switching device (Q8, Q9)

for switching said direct current input voltage via a transformer (T3) and a driving section (R1, R2, CR) for driving said switching device, and said feedback section (D7, D8) arranged in a manner that feeds back the rectified voltage to the driving (R1, R2, CR) via the transformer T3 to stabilize said power-supply voltage or current.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 9 and 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of the admitted prior art cited by the applicant.

Lee discloses substantially the claim invention as noted above except for not explicitly employ light emitting diodes as a backlight as required in claim invention,

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wherein each group of a plurality of said backlight sections is supplied by each power conversion section.

The admitted prior art cited by the applicant in the Figure 8 discloses what have been missed in the Lee's display panel device in that a number of LED groups used in backlight sections (110) is energized by a number of second power conversion sections (109a -109c) that equals to the number of LED groups.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt a different type of lamps in a multiple arrangement as taught by the admitted prior art in order to satisfy users by extending to a variety of lamp types while ensuring safety power delivery. Such implementation is considered as a routine skill in the art.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYET VO whose telephone number is (571)272-1830. The examiner can normally be reached on Mon-Wed and Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 2800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuyet Vo/

Primary Examiner, Art Unit 2821

September 04, 2009